

In the Polypodiaceae, another family of considerable horticultural interest to North American growers, the generic classification generally follows that of HENNIPMAN et al. in the "Families and Genera of Vascular Plants" volume. An exception is the inclusion of *Phymatosorus* in *Microsorium*. For this genus and *Selliguea*, there are secondary keys to species in different geographic subsets of the Malesian region.

In total, this is another outstanding contribution to the Flora Malesiana. In addition to the inclusion of some groups of relatively great horticultural and economic importance, this particular installment will be of value to anyone seeking to understand the modern generic classification of the taxonomically complex Polypodiaceae, which, except for the aforementioned very expensive "Families and Genera" volume, previously has not been summarized in detail in an accessible form for the Old World species.—GEORGE YATSKIEVYCH, Missouri Botanical Garden, P.O. Box 299, St. Louis, MO 63166-0299.

Bibliografía sobre Gametofitos de Helechos y Plantas Afines, 1699–1996, by Blanca Pérez-García and Ramón Riba. Monographs in Systematic Botany from the Missouri Botanical Garden, volume 70. 1998. Missouri Botanical Garden Press, 4344 Shaw Blvd., St. Louis, MO 63110. 98 pp. Softcover (ISBN 0-915279-61-4, ISSN 0161-1542). \$20.00 plus \$4.00 shipping/handling.

This useful bibliography covers nearly 300 years of publications on various aspects of pteridophyte gametophytes. The brief introduction is in Spanish and might have been printed in English as well. However, most non-Spanish speaking pteridologists will be able to understand the gist, if not the details, of the half page that this covers, and the introduction is not necessary to the use of the remaining matter. The main 75 pages of the volume contain the lengthy bibliography itself, arranged in a single alphabetical sequence of 2195 entries. Each entry is followed by one or more numerical codes in parentheses, referring to numbered headings in a subject index that follows. Similarly, a taxonomic index containing a single alphabetical sequence of genera and families has these numerical codes following each author/date citation.

A key to the contents of the subject index appears on p. 2, between the introduction and the main text, again in Spanish. The technical terms are sufficiently similar to their English equivalents as to be usable without translation. The subject index has two main subject headings, spores and gametophytes. The Spores heading is further broken into five subheadings ranging from factors affecting germination to ultrastructure. The factors affecting germination are further subdivided into eight subject areas, ranging from methodological concerns to environmental stimuli like temperature, light, and chemicals. The Gametophytes heading is similarly broken into a number of subject headings. As with any attempt to organize a large body of diverse literature into discrete subject headings, there are inevitable problems of selection of headings and overlapping subject areas in a given paper. The authors have done a creditable job of balancing the tendency to divide the subject

headings ever more finely at one extreme with the loss of utility in headings that are too broad at the other. Nevertheless, individual readers probably will have minor quibbles here. For example, I would have preferred a discrete section on studies dealing with antheridiogens, but these are immersed in a more general subject heading entitled Metabolism, Biochemistry, Molecular Biology, and Chemical Components.

Anyone who develops an interest in fern reproduction will find this bibliography a convenient starting point for delving into the surprisingly large body of literature on various aspects of spore and gametophyte structure, physiology, ecology, biochemistry, and genetics. Even more seasoned prothalliists will gain a more complete historical perspective on their field. It is hoped that the authors will periodically issue updates to this work.—GEORGE YATSKIEVYCH, Missouri Botanical Garden, P.O. Box 299, St. Louis, MO 63166.